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ABSTRACT

Recent research on classroom achievement dynamics suggests a conflict of teacher/student values regarding effort expenditure. Student effort is clearly rewarded and the indifferences punished by teachers. From the student perspective, expending effort when risking failure is a potential threat because high effort/failure invites ascriptions to low ability. The effect of effort stability on teacher and student reactions to failure was investigated to determine if students with a history of persistent effort evaluated differently in failure from students who were characterized by erratic bursts of energy and periods of indifference to study, and to examine, from the student perspective, if a reputation for erratic study patterns acted to reduce shame by deflecting the causes of failure away from low ability. College students made ability inferences and rated affective reactions to hypothetical series of test failures along two dimensions: amount of overall effort and stability of effort. Other subjects, in the role of teachers, administered punishment to hypothetical students under the same conditions. Results confirmed self-worth predictions and strengthened the case for the existence of a conflict of teacher/student values. Within any level of effort (either high or low), one effort pattern was preferred by students and another by teachers. (Author)

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Effort stability: A new dimension in the teacher/student value conflict?

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Recent research on classroom achievement dynamics suggests a conflict of teacher/student values regarding effort expenditure (Covington & Omelich, 1979a, 1979b). Student effort is clearly rewarded, and indifferences punished by teachers; yet, from the student perspective, expending effort when risking failure is a potential threat. This occurs because high effort/failure invites ascriptions to low ability; and according to self-worth theory, perceptions of incompetency are to be avoided due to our society's tendency to equate personal worth with the ability to achieve competitively. In effect, those failures that elicit the least student shame (low effort) lead to the greatest teacher punishment; whereas the least punished failure (high effort) is most shameful to students. These dynamics are well established for single failures; yet, in reality both students and teachers react to patterns of achievement over time which often involve considerable variation in effort expenditure. As a group, previous studies in self-worth theory focused on only a single failure incident, isolated in time, without consideration for the student's past history of effort expenditure. Consequently, it is reasonable to wonder if these well-documented teacher evaluation modes and characteristic student reactions to failure will differ as a function of student effort patterns. For example, is the student with a history of persistent effort evaluated differently in failure from the student who, motivationally, is characterized by erratic bursts of energy and periods of indifference to study? And, from the student perspective, does a reputation for erratic study patterns act to reduce shame by deflecting the causes of failure away from low ability. This latter question implies that unpredictable effort expenditure, like excuses, may possess self-serving, defensive elements which allow for maintenance of self-perceptions of ability despite failure.

Central to these inquiries is the notion of <u>unstable</u> effort. In Heider's

original (1958) causal attribution model, effort was considered an internal-unstable element. Subsequently, however, attribution theorists have noted the trait-like quality of consistently high or low effort expenditure, and postulate a distinction between stable and unstable effort (Weiner, 1974; 1979). Our own particular interest in the concept of stable/unstable effort relates to its potential role in the teacher/student conflict of value described above. The primary objective of this study is to investigate the extent to which an effort stability dimension influences teacher feedback behavior as well as student perceptions of their ability and degree of dissatisfaction in repeated classroom failures. It is well known that effort level per se (e.g. high or low) exerts a powerful influence on the dependent variables of interest. Accordingly, we assess the effect of effort stability (patterns) independent of effort level. In effect, we ask to what degree will patterns of student effort expenditure influence classroom achievement dynamics, beyond sheer quantity of effort? To define effort instability we employ three different patterns of inconsistent effort within both high and low effort levels: A descending pattern of study, described by effort expenditure only on early tests in a series of classroom examinations; an ascending pattern of belated effort; and an apparent random pattern of study over the series of tests.

Student reactions to failure:

Our expectations regarding the role of effort stability in classroom achievement dynamics can be put in a form of several specific predictions. First, consider the issue from the student perspective. Effort instability in failure is likely either to magnify or moderate self-ascriptions to inability depending on whether overall effort level is high or low. In low effort failure, effort of instability should magnify suspicions of incompetency because any burst

of energy that ends in failure, infrequent as it may be, is likely to provide disproportionate evidence for inability not available when the student is consistently marginal in effort expenditure. As a consequence of such increased self-doubts, and according to self-worth theory, personal dissatisfaction should be greater under unstable low effort thatn under stable low effort.

We apply the same general reasoning to our predictions regarding high effort outcomes. Instability in high effort, that is, an occasional lapse of effort in an otherwise uniformly high level of motivation, should lead to a reduction in inability inferences since incidents of low effort/failure introduce ambiguity regarding one's ability status (Covington & Omelich, 1979b; Kun & Weiner, 1973).

Teacher reactions to student failure:

Stable/unstable effort predictions regarding teacher evaluation follow from the role distinction often drawn between teachers as behavior modifiers contrasted to conveyers of cultural values (Frankena, 1963; Nowell-Smith, 1954). It has been contended (Rest et al., 1973) that teacher reward and punishment, to be effective, should be restricted to actions that are under the voluntary control of students. Unstable effort, either high or low, by reason of its variability is generally perceived as modifiable. Thus if teachers predominantly follow a reinforcement-modifier mode, the magnitude of punishment in unstable low effort should be greater than the negative reaction to stable low effort which implies a trait-like condition. A commonplace example is the tendency among teachers simply to give up on students who never try. They reason with some justification that their time is better spent assisting students who want to learn. These arguments not withstanding, an equally persuasive case can be made that stable

low effort will be most punished. It is widely held by teachers and parents alike that while students are not equally bright, at least everyone can try. Thus by punishing stable low effort severely, teachers act as conveyors of prevailing "work ethic" values. These contrary possibilities are tested in this study.

In the case of high expenditure, these two interpretations for why effort is rewarded -- for virtue's sake or to modify behavior -- cannot be as easily disentangled. More specifically, teachers are likely to perceive stable high effort as also under voluntary student control, since pupils can always choose not to study, thus, teachers may encourage maintenance of consistently high effort by minimizing punishment in the event of failure, thereby acting as both moralist and behavior modifier.

Teacher-student values conflict:

If the foregoing predictions regarding student dissatisfaction and teacher punishing behavior prove correct, we can expect that the introduction of an effort stability dimension will do little to alter the student-teacher conflict of values regarding effort expenditure, and may even worsen it. For example, while unstable study patterns in high effort/failure may reduce student shame, owing to a deflection of inability inferences, teachers are likely to punish more severely those occasional lapses of effort in an otherwise high-effort profile. The low effort condition simply presents the mirror image: an occasional burst of study should forestall teacher punishment because it implies motivation and striving, yet effort expenditure in failure acts to increase student dissatisfaction due to increased self-doubts of ability. Thus while effort instability may moderate both student and teacher reactions in failure, it likely does so in

opposite ways.

Methods

Subjects were 364 students enrolled in an introductory psychology course at the University of California, Berkeley. During a single class meeting, 187 subjects evaluated eight hypothetical failure situations from the teacher perspective, while 177 subjects, as students, made self-ability estimates and rated dissatisfaction, presented a different pattern of effort ecpenditure in having failed repeatedly along two dimensions: amount of overall effort expenditure (high or low) and the stability/instability of effort expenditure. Hypothetical study sequences were symbolically represented by a series of plus and minus signs, indicating relatively more (+) or less (-) study. Thus students could fail the series of three tests in eight ways: stable/low effort (---); stable/high effort (+++); and unstable/high or unstable/low effort. Three permutations of unstable/low effort were defined and labelled descriptively as: ascending (--+); random (-+-); and descending (+--). Similar permutations were also presented for unstable/high effort: ascending (-++); random (+-+); and descending (++-).

Results and Discussion

Student reactions:

Self-estimates of ability. The first column in Table 1 presents mean values and standard deviations for student self-estimates of ability under repeated failure for the eight conditions of effort expenditure. As predicted, within low effort expenditure, stable effort triggered less ascription to inability than the average of the three combined unstable effort conditions ($d = .49$; $p < .05$; $\omega^2 + .001$).

However, this difference depended entirely on the unstable descending pattern (d = .72, $p < .05$), a finding that underscores the importance of the primary effect in influencing not only perceptions of others (Jones et al., 1968) but self-perceptions as well. In contrast to the low effort condition, stability led to more negative self-estimates of ability in high effort (d = .75, $p < .05$, ω^2 = .020) with each of the three unstable patterns differing significantly from stable effort (ascending, d = .78; random, d = .71; descending, d = .75, $p < .05$). Thus an occasional lapse of study in an otherwise high-effort profile introduced ambiguity regarding one's ability status, uncertainty which was resolved in a positive direction by the student according to Kelley's "discounting principle" (1973).

Affective reactions. The second column in Table 1 presents mean values and standard deviations for student dissatisfaction under repeated failure for the same eight conditions of effort expenditure. As predicted, within high effort expenditure stable effort was more distressing to students than unstable effort (d = .385, $p < .05$; ω^2 = .002), an outcome that occurred in two of the three unstable patterns (ambiguous, d = .47; descending, d = .55, $p < .05$). Within low effort level, stable expenditure led to less dissatisfaction than did unstable effort expenditure (d = .79, $p < .05$; ω^2 = .035), an outcome consistent across each of the unstable/low patterns (ascending, d = .87; random, d = .79; descending, d = .71, $p < .05$).

Note the parallelism between affective reactions and concommitant ability estimates: Those conditions of effort expenditure that fostered the greatest dissatisfaction were associated with increasing inferences to inability, and those situations that elicited the least dissatisfaction moderated suspicions

of inability. According to self-worth theory, negative affect is mediated by attributions to inability. Stronger evidence for this causal linkage than mere parallelism of outcomes is provided by an analysis of the regressions of affective ratings on ability estimates. For males, personal dissatisfaction followed from perceiving oneself as lacking in ability (high effort, $\underline{b} = .23$; low effort, $\underline{b} = .26$, $\underline{p} < .01$.). For females, personal disappointment was not influenced by attributions to inability (high effort, $\underline{b} = .01$; low effort, $\underline{b} = .13$; $\underline{p} < .05$), likely because high ability appears to be personally less important to women as a means of achievement (Zander, Fuller & Armstrong, 1972).

In summary, the foregoing data confirmed the importance of the effort-ability linkage in determining affective reactions to failure, and further indicated that effort stability when considered independent of effort level contributed little to this process, a conclusion drawn from the fact that the associated ω^2 values were essentially negligible.

Other Achievement-related attributions. Table 2 presents mean values and standard deviations for other self-descriptive ratings given by these subjects. Planned complex contrasts between low-effort and high-effort expenditure, irrespective of the stable/unstable dimension, indicated not surprisingly that students low in overall effort saw themselves as less conscientious (Variable 4), less motivated (Variable 6) and less persistent (Variable 7), but more lazy (Variable 5) and more procrastinating (Variable 8), $p < .05$. As to affective reactions, low effort nonachievers described themselves as being less anxious (Variable 1), less discouraged (Variable 2), and less frustrated (Variable 3) than high effort individuals ($p < .05$). The effort stability dimension adds little by way of either moderating or magnifying the already unflattering motivational self-descriptions in low effort. Indeed, instead of depression and hopelessness, the dominant impression that emerges for low effort individuals is one of apparent indifference. While low effort subjects, both stable and unstable, readily described themselves in negative motivational terms, such self-deprecation was accompanied, curiously enough, by reduced negative affect. Regression analysis confirmed that the source of this reduced distress in low-effort failure, like lowered shame, lay in the maintenance of a sense of competency. Contrary to the assumptions of the learned helplessness position that despair and discouragement accompany the low-effort syndrome, the resulting higher ability estimates led to less discouragement ($b = -.16$, $p < .05$), frustration ($b = -.12$, $p < .05$), and anxiety ($b = -.09$, $p < .10$).

The important point here is not confirmation of the obvious fact that people describe themselves in pejorative terms when they do not work hard, but

rather that despite the clear negative consequences to one's reputation of not trying, a low effort profile nonetheless remains the preferred student mode when risking failure (Berglas & Jones, 1978; Covington & Omelich, 1979b; Nichols, 1976). Contrary to the general assumption that students who do not try are unmotivated, they appear, in fact, to be highly motivated, but for the wrong reasons. The willingness of many students to endure the social and personal stigmatization inherent in chages of laxity, laziness and procrastination suggest that they are driven to avoid the implications of failure and the consequent negative affect and loss of esteem (Bricklin & Bricklin, 1967). It is in this sense that we believe students to be conflicted by contradictory impulses. We know that teachers value trying, and severely punish low effort. Yet despite this, student self-ascriptions to positive motivational descriptors were associated with feelings of personal dissatisfaction: Conscientious, r = -.48; Motivated, r=-.22; Persistent, r +-.29; Lazy, r = .39, and Procrastinating, r = .23, $p < .05$.

Teacher punishment:

It will be recalled that half our subjects temporarily adopted the role of teacher and punished hypothetical students who failed under each of the conditions of effort expenditure. The last column in Table 1 presents mean values and standard deviations for these data. As expected, low student effort irrespective of stability, led to more negative teacher feedback than did high effort (d = 3.70, $p < .05$; ω^2 = .782). Now consider the consequences of effort stability for teacher evaluation. Within the low effort condition, stable effort was the more punished scenario compared to the average of the three combined unstable conditions (d = 1.29, $p < .05$; ^{2} =.03). This finding is contrary to the prediction offered by Rest et al. (1973) that teachers are apt to reinforce differentially only modifiable behaviors. In the case of high effort, it is the stable, diligent output that was least punished in repeated failure as compared to unstable effort

patterns ($\underline{d}$ + 1.06, $\underline{p} < .05$; ω^2 = .019). This suggests that teachers at least in this situation act both as conveyors of the prevailing "work ethic" value system and motivation-reinforcing agents. However while teachers may act intermittenly in both roles, it is clear that amount of student effort per se rather than effort pattern is the dominant factor influencing teacher punishment, given the very modest portion of the variation in teacher behavior explained by this latter factor.

An analysis of the qualities attributed to students by our teachers rounds out this picture. The data reported in the right-hand portion of Table 2 make it clear that teachers, like our students, attributed predominantly negative motivational qualities to low-effort pupils, all $\underline{F}$ (7,104) 1.99, $\underline{p} < .05$. Planned complex contrasts between the high-effort and low-effort conditions, irrespective of effort stability, indicated that low effort pupils were seen as less conscientious (Variable 4), less motivated (Variable 6), less persistent (Variable 7) and more procrastinating (Variable 8) and lazier (Variable 5), attributes that were incidentally associated with conditions of increased punishment. Indeed, it appears that punishment depends in part on such labeling. An analysis of teacher feedback data regressed on teacher perceptions was performed over the eight failure conditions. Increased punishment followed from perceiving a student as Lazy ($\underline{b}$ = -.85) and Procrastinating ($\underline{b}$ = -.37), $\underline{p} < .05$. Contrariwise, punishment decreased to the extent that students were characterized as work-oriented: Conscientious ($\underline{b}$ = 1.08); Motivated ($\underline{b}$ = .94); and Persitent ($\underline{b}$ = .80), $\underline{p} < .05$. Reduced punishment also followed from students being seen as Anxious (conscientious) ($\underline{b}$ = .89), Discouraged ($\underline{b}$ = .28), and Frustrated ($\underline{b}$ =.30), $\underline{p} < .05$.

Armed with these findings, we can now consider more fully the impact of a

stable/unstable effort dimension on teacher punishing behavior. Within low-effort, unstable studying patterns moderated somewhat the generally negative teacher judgements which followed from students not trying at all, but only with respect to affective variables. Unstable low-effort students were assumed by our teachers to be more anxious to please (Anxious, $\underline{d}$ = 1.01) than were stable low-effort individuals and also more Discouraged ($\underline{d}$ = 1.98) and Frustrated ($\underline{d}$ = 1.58) because effort, when it occured, did not pay off, $\underline{p} < .05$. Stable/unstable contrasts for all but one of the five motivational variables proved nonsignificant, the exception being Conscientiousness ($\underline{d}$ = 1.15, $\underline{p} < .05$). Thus we conclude that increased punishment in stable low effort has little to do with punitive treatment of negative trait-like characteristics (e.g., laziness), since our teachers did not generally draw such motivational distinctions between stable and unstable low effort individuals. Rather the more likely cause of stable/unstable differences is a natural, empathetic reaction extended to those students whose efforts, once they do try, are not crowned with success (see regression coefficients above).

Turning to the high-effort condition, it is now the stable effort individual who was perceived as being more anxious to please ($\underline{d}$ = .80, $\underline{p} < .05$), whereas among unstable high-effort individuals, a single lapse of an otherwise high-effort profile was taken as a sign of Discouragement ($\underline{d}$ = 1.22, $\underline{p} < .05$). Finally, high stable effort individuals were perceived as more Motivated ($\underline{d}$ =1.17), Persistent ($\underline{d}$ = 1.49, $\underline{p} < .05$) and less Lazy ($\underline{d}$ = .80, $p < .09$). The net effect of such labeling was a reduction of punishment for the high stable effort individual (see regression coefficient above). The tendency to reward more, and punish less, those individuals who appear motivated is consistent with both views of teachers as moralists and behavior modifiers.

General Discussion

The present research indicates that the teacher-student conflict of values regarding effort expenditure already documented for single, isolated failures occurs over accumulated failures as well. More important, this study also elaborates on the basic dynamics involved in several specific ways.

First, the research points to the existence of a significant intra-personal conflict among students. While students have clearly internalized the values of hard work and describe themselves in self-deprecatory terms when they do not try, positive trait-like descriptions (e.g. persistence) are nonetheless associated with personal dissatisfaction. This reveals yet another critical aspect of the classroom achievement dynamic: students are not only at adds with the teachers regarding the value and significance of effort, but they experience an intra-psychic conflict as well. While low-effort expenditure is the overwhelmingly preferred student strategy when risking failure (Covington & Omelich, 1979b; Nicholls, 1976; Sohn, 1977), it is here shown that low-effort is most associated with negative, self-deprecatory attributions. The willingness of some students to endure charges of laziness, indifference, and procrastination suggest that they are driven hard to avoid the implications of failure (that they are incapable). This implies that student inaction and indifference to learning, despite appearances of passivity, are actually highly motivated behaviors, and that there is more to withholding effort than merely a rational judgement by students to husband their time and energy when the likelihood of success is low.

Second, the basis on which teachers determine student feedback is more complex than implied by the simple distinction between teachers as moralists and behavior modifiers. Not only are these feedback strategies often compatible, and appear to

coexist in high effort maintenance, but they also seem insufficient to account fully for teacher behavior in the event of low student effort. An empathetic impulse to offset the frustration of unrewarded effort by reducing punishment may be operating here as well. This particular finding well illustrates the disparity between teacher and student perceptions. While teachers may perceive student distress in failure as caused primarily by noncontigent reinforcement of effort, in reality, student discouragement actually follows from increasing suspicions of inability, triggered ironically by the very effort expenditure teachers seek to encourage.

Finally, results confirm self-worth predictions and strengthen the case for the existence of a conflict of teacher/student values which is intensified by the introduction of the effort/stability dimension. Specifically, within any level of effort (either high or low) one effort pattern is preferred by students, and another by teachers. For example, while an occasional burst of student effort in an otherwise low profile of energy expenditure (unstable/low-effort) reduces teacher punishment, it also increases the student self-doubts of ability. Conversely, occasional lapses of effort in an otherwise uniformly high level of motivation (unstable high-effort) reduces inferences to inability, but incurs greater teacher punishment than if the student had been uniformly diligent (stable, high-effort). But these findings must be qualified. While it is clear that stable/unstable effort patterns do consistently influence both teacher punishing behavior and student dissatisfaction, the impact of this dimension is expressed only after effort level is known and even then its influence measured in terms of explained variance is extremely modest. Amount of effort expenditure remains the central factor. Variations in effort patterns do little to mitigate the double jeopardy of expending effort when risking failure, a drama in which

students must thread their way between the threatening extremes of too much effort -- to avoid inferences to low ability -- and no effort at all -- to escape teacher punishment. The possibility was raised earlier that unstable study patterns may possess a self-serving, defensive function for the maintenance of self-perceptions of ability. However, the fact that low unstable effort patterns lead to greater (rather than less) ability demotion belies this hypothesis as does the relatively modest decrease in teacher punishment afforded by such low-effort patterns. While it is true that instability in high-effort deflects inferences of ability, this hedge against ability demotions is, at best, modest. This general insensitivity of both self-reactions and teacher punishing behavior to a stable/unstable effort dimension can be contrasted to the sizeable self-protection and reduction in teacher punishment that occur when explanations (excuses) accompany effort variations (Covington & Omelich, 1979b). Apparently, in order to be effective as a self-protective hedge against both teacher punishment and ability demotion, low effort failures must be accompanied by convincing reasons (such as illness) that externalize personal responsibility by explaining why student could not study at all. Similarly, high-effort failures must involve specific reasons for why study did not pay off (e.g., "I stressed the wrong material"), if they are to allow failure with impunity even in the face of high-effort.

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Table 1

Means and Standard Deviations for the Dependent Variables by Conditions of Effort Expenditure over Repeated Failure

	Dependent Variables[a]					
	Ability (self)		Satis-faction		Feed-back	
Conditions of Effort	M	SD	M	SD	M	SD
Stable (combined)	-2.90	2.58	-3.67	2.20	- .91	2.53
Unstable (combined)	-2.76	2.48	-3.87	1.88	- .79	2.53
Low (combined)	-1.90	2.39	-2.92	2.05	-2.67	2.40
Stable (——)	-1.53	2.51	-2.33	2.33	-3.64	2.31
Unstable (combined)	-2.02	2.35	-3.12	1.96	-2.35	2.43
Ascending (—+)	-1.78	2.37	-3.20	1.97	-2.22	2.31
Ambiguous (-+-)	-2.02	2.31	-3.12	1.85	-2.35	2.39
Descending (+—)	-2.25	2.38	-3.04	2.06	-2.48	2.59
High (combined)	-3.69	2.62	-4.72	1.84	1.03	2.66
Stable (+++)	-4.25	2.63	-5.01	2.06	1.82	2.75
Unstable (combined)	-3.50	2.63	-4.62	1.78	.76	2.63
Ascending (-++)	-3.47	2.75	-4.86	1.66	1.05	2.61
Ambiguous (+-+)	-3.54	2.41	-4.54	1.78	.66	2.58
Descending (++-)	-3.50	2.65	-4.46	1.85	.58	2.69

[a] Ratings made on a 13 point scale ranging from (-6) to (+6)

Table 2

Means and Standard Deviations for Attributions by Students (Self) and Teachers (Others) by Level and Stability of Effort Expenditure

Attribute [a]		Student (Self) (n = 112)				Teacher (Other) (n = 112)			
		Effort Level				Effort Level			
		Low		High		Low		High	
		S	U	S	U	S	U	S	U
1) Anxious	M	2.50	3.41	5.14	4.71	2.15	3.16	5.38	4.58
	SD	1.78	1.59	1.56	1.11	1.07	1.80	1.15	1.61
2) Discouraged	M	3.54	4.60	5.14	4.80	2.69	4.67	3.50	4.72
	SD	1.81	2.08	2.63	2.50	1.18	1.86	2.13	2.03
3) Frustrated	M	3.85	4.33	4.71	4.96	3.00	4.58	4.00	4.70
	SD	1.52	2.18	2.64	2.43	1.35	1.83	2.45	1.93
4) Conscientious	M	2.08	2.56	4.64	4.16	1.46	2.61	4.88	4.51
	SD	1.26	1.25	1.08	1.39	.52	1.23	1.50	1.41
5) Lazy	M	5.23	4.51	2.36	2.73	4.85	4.77	2.00	2.80
	SD	1.96	1.85	1.69	1.18	2.58	1.70	1.59	1.34
6) Motivated	M	1.69	2.07	4.00	3.63	1.62	2.11	5.25	4.08
	SD	.95	.87	1.88	1.36	.96	.99	1.53	1.50
7) Persistent	M	3.00	2.18	4.86	4.06	2.31	2.42	5.63	4.14
	SD	1.83	.97	1.87	1.35	1.80	1.72	1.41	1.25
8) Procrastinating	M	4.46	4.32	2.57	3.72	4.07	4.75	2.75	3.19
	SD	2.40	2.13	1.45	1.36	2.43	1.49	1.69	1.28

[a] Scale: 1 = not at all; 7 = extremely.

S = stable effort (n = 14); U = unstable effort (3 unstable patterns combined, n = 42)

FIGURE 1

Student and Teacher Evaluative Responses to Eight Types of Failure